

XXVI. *Descriptions of some new Species of exotic Hymenoptera belonging to Evania and the allied Genera, being a Supplement to a Memoir on those Insects published in the Third Volume of the Transactions of the Entomological Society.* By J. O. WESTWOOD, Esq., F.L.S.

[Read June 2nd, 1851.]

SINCE the publication of the Memoir above referred to, various new species of the genera there described having come to my hands, and others having been described by recent authors, I have thought it might be considered useful to publish these additions by way of supplement to my Memoir; more especially as several of the species now described possess characters of considerable interest, and the synonymy of some of the species contained in my former Memoir requires further observation.

Genus EVANIA.

Evania appendigaster, Linn.; et *lævigata*, Oliv. Westw. Trans. Ent. Soc. vol. iii. p. 241.

Admitting the distinction between these two species (although adopting the nomenclature of the Marquis Spinola relative to the former species), M. Guérin-Méneville (*Revue Zoologique*, 1843, p. 334,) states, that, having examined many individuals of *E. lævigata*, he invariably found the radial cell to be triangular, whilst in *E. appendigaster* it is semi-oval, as described by Latreille, and figured by Jurine, pl. 2, ord. 2, gen. 1, and pl. 7. In *E. appendigaster*, moreover, the head is more convex in front, and the antennæ are inserted much lower in the face, nearly level with the lower extremity of the eyes, whence their scapes are longer. In *E. lævigata* the front of the head is much less prominent, and the antennæ are inserted on a line running between the eyes, scarcely below their middle.

Evania fuscipes, Nees von Esenb., Illig., Westw. Trans. Ent. Soc. vol. iii. p. 241.

M. Guérin-Méneville introduces this insect as the female of *E. appendigaster*.

Evania Cubæ, Guérin. Westw. Trans. Ent. Soc. vol. iii. p. 242.

M. Guérin-Méneville (Iconogr. du Règne Animal, Texte, p. 405) states, that "on ne doit pas la distinguer de l'*Evania lævigata* decrite par Olivier dans l'Encyclopédie Méthodique."

Evania Desjardinsii, Blanchard. Westw. Trans. Ent. Soc.
vol. iii. p. 242.

According to M. Guérin-Méneville (Revue Zoologique, 1843, p. 334), this supposed species is the male of *Evania lævigata*, the *Evania appendigaster* of Blanchard being the female of the same *E. lævigata*.

Evania rufipes, Fabricius. Westw. Trans. Ent. Soc. vol. iii.
p. 245.

The *Evania thoracica*, Blanchard, Hist. Nat. Ins. (ed. Dumesnil, iv. p. 299), from Carolina, is stated by M. Guérin-Méneville (Rev. Zool. 1843, p. 334) to be identical with this Fabrician species, which is a native of South America; but by a note subsequently published by M. Guérin (Rev. Zool. 1844, p. 39) it appears that the two species are distinct, the *thoracica* of M. Blanchard being only two lines long, and not having the four fore-legs red, as described by Fabricius. The description given by M. Blanchard, "toute la partie supérieure du thorax est d'un rouge de brique," also removes it from my *Evania bicolor*, Trans. Ent. Soc. vol. iii. p. 246, which has the thorax entirely ferruginous. It will, therefore, be necessary to reinstate M. Blanchard's species under the name of

Evania dorsalis,

in order to avoid confusion with the two other species to which the name of *thoracica* had been applied by Drs. Klug and Leach.

Evania (Hyptia) Poeyi, Guérin-Méneville, in Rev. Zool. 1843,
p. 335.

This species is closely allied to *E. petiolata*, Fab., but is larger, and the scutellum is not black. The fore wings have the cells obliterated, those at the base of the wings being open and incomplete, whereas in *E. minuta* the latter are complete and closed. The metasternum is not furcate. It is a native of Cuba, and measures 9 millimetres in the expanse of its fore wings.

Evania (Hyptia) Servillei, Guérin-Méneville, in Revue Zool. 1843, p. 335; Brullé, Hist. Nat. Ins. Hym. iv. p. 529.

This species is black, with the head and thorax strongly rugose. The antennæ thick, scarcely so long as the head and thorax, blackish, with the first joint fulvous. The four fore legs are fulvous, with the middle of the thighs and tibiæ brownish. Hind legs thick, short, blackish, with the joints subfulvous; wings transparent, short. It measures 8 millimetres in the expanse of the fore wings.

Inhabits St. Domingo. Coll. Serville.

Evania sericans, Westw. nov. sp.

Nigra, valde sericea, thorace rufo, mesosterno in medio nigro, metasterno vix furcato; antennis pedibusque longis nigris, tibiis tarsisque anticis piceis.

Long corp. lin. $3\frac{1}{2}$. Exp. alar. lin. 6.

Habitat in Australia, King George's Sound.

In Mus. Westwood.

Caput nigrum, antice convexum, pro receptione scapi antennarum haud impressum, rugosum, facie lateribusque pone oculos sericeis. Antennæ vix subtus medium oculorum insertæ, longæ (fere longitudini totius corporis æquales), omnino nigræ, scapo brevi. Palpi lutei. Thorax ferrugineus, mesosterno tantum in medio nigro, valde scaber, metathoracis lateribus areolatis, lateribus parteque postica (pro receptione pedunculi abdominalis canaliculata) sericeis. Metasternum minimum, apice fisso. Petiolus abdominis piceus, oblique striatus. Abdomen parvum, compressissimum, elongato-ovale, articulo basali subtus in angulum producto, lateribus versus dorsum sericeis. Alæ hyalinæ, venis distinctis, areola marginali subsemi-ovali, apice infero curvato nec angulato. Pedes longi, nigri; tibiæ et tarsi antici picei.

Evania nobilis, Westw.

Ferruginea, grosse punctata; capite nigro punctato, carina tenuissima faciei, antennis et abdomine nigris, pedibus anticis piceo-castaneis, posticis nigris.

Long. corp. lin. 5. Expans. alar. antic. lin. 9.

Habitat in Brasilia. In Mus. Britann.

Clypeus lævis, linea tenui curvata impressa (e latere interno antennarum ad os ducta) e genis separatus. Antennæ longæ,

crassæ, 13-articulatæ, articulis 3 et 4 subtus piceo-rufis. Mandibulæ nigræ; palpi lutei. Thorax ferrugineus, punctatus, metanoto areolato. Abdomen nigrum, lateribus pedunculi rugosis; valde compressum, supra curvatum, subtus angulatum. Pedes 2 antici lutescenti-rufescentes, coxis omnibus lutescentibus; femoribus intermediis pedibusque posticis nigris. Venæ alarum ut in *E. principe* dispositæ.

Evania perfida, Westw.

Nigra, punctata, metanoto valde declivi, areolato, et profunde impresso; pedibus fulvis, tarsis omnibus tibiisque duabus posticis nigris.

Long. corp. lin. $2\frac{3}{4}$.

Habitat in Terra Van Diemenii. In Mus. Britann.

Tota nigra, capite et thorace valde punctatis, metanoto areolato. Pedunculus brevis, punctatus. Abdomen dorso arcuato, ventre recto, basi truncato, apice obliquo. Antennæ in medio faciei inter medium oculorum positæ. Alæ mihi desunt.

Evania Brullei, West.

Syn. *Brachygaster rufipes*, Brullé, Hist. Nat. Ins. Hym. iv. p. 528; nec *E. rufipes*, Fab. An *E. fulvipes*, Curtis, var.

“Niger, dense punctatus, alis hyalinis, nervis et stigmatibus rufis, pedibus 4 anterioribus fere totis, posterioribus 2 geniculis rufis, antennis incrassatis.”

Long. 0,005.

Habitat “environs de Paris.”

Genus MONOMACHUS.

Monomachus ruficeps, Brullé, Hist. Nat. Ins. Hym. iv. p. 535.

“Supra fuscus, subtus et lateribus obscure rufis, pedibus fuscis, femoribus obscure rufis, capite ferrugineo, metathorace rugoso” ♀.

Long. 0,020.

Habitat Brasil. Prov. de St. Paul. Coll. Mus. Hist. Nat. Paris.

Monomachus gladiator? Klug.

Brullé, Hist. Nat. Ins. Hym. iv. p. 535.

“Rufus, antennis, abdomine fere toto, pedibus posterioribus 2

supra nigris; facie, fronte et metathorace punctatis; alis anterioribus apice fuscis" ♀.

Long. 0,020.

Habitat Cayenne. Coll. Serville.

Obs.—The late Dr. Erichson considered the genera *Monomachus* and *Pelecinius* as belonging to the *Proctotrupidæ*.

Genus FÆNUS.

M. Guérin-Méneville (Iconogr. Règne An., Texte, p. 406 et seq.) has added the seven following species to this genus. M. Blanchard has published the description of another species from Brazil, and seven additional species from the collections of the British Museum, &c. are also here described.

Fœnus Pyrenaicus, Guér.-Mén. op. cit. p. 406.

Black, with the posterior half of the first segment, the whole of the second, and a small patch on each side of the third, fulvous red. Legs black, with a small yellow ring at the base of the tibiæ; oviduct nearly as long as the abdomen, its lateral fillets entirely black; wings transparent.

Long. corp. 14, exp. alar. 15 mill.

Habitat Tarascon (Pyrenees) [Berlin, Dr. Klug].

Intermediate between *F. jaculator* and *assectator*.

Fœnus Caucasicus, Guér.-Mén. op. cit. p. 406.

Black; thorax transversely striated. Abdomen very long, compressed, very slightly thickened at the tip, with the hind edge of the first and second segments of the abdomen slightly spotted with yellow at the sides. Oviduct much longer than the whole body, with the tips of the lateral fillets yellow. Four fore legs, with the articulations, fulvous brown; base of the tibiæ whitish, tarsi fulvous. Hind legs black, with the base of the tibiæ and the first joint of the tarsi (except at the base) yellow. Wings transparent.

Long. 14, exp. alar. 14, length of ovipositor 16 mill.

Habitat Caucasus.

Nearly allied to *F. jaculator*.

Fœnus rubricans, Guér.-Mén. op. cit. p. 407.

Fulvous; thorax rugose; neck, a large spot in front of the thorax, a small spot above the insertion of each wing and the scutel-

lum, black. Abdomen very compressed, short, suddenly thickened at the tip, black at the base, and annulated with black and red beyond the middle. Oviduct very short, about one third of the length of the abdomen, with the lateral fillets black. Legs fulvous, with the coxæ and trochanters of the middle and hind pairs black, middle of the hind thighs and tibiæ brown; antennæ brown. Wings transparent, with brown veins.

Long. 10, exp. alar. 10 mill.

Habitat France. Dauphiny, [Germany, Italy].

Fœnus Hollandiæ, Guér.-Mén. op. cit. p. 407.

Black; underside of the head and thorax sericeous. Abdomen very long, gradually widened to the tip, compressed, especially at the base, with the ovipositor short, not half the length of the abdomen; lateral filaments black, with the tips white. Four fore legs fulvous, with the middle of the tibiæ and two last joints of the tarsi blackish. Hind legs entirely black, with the tarsi yellow, except the base of the first and tip of the last joints, which are black. Wings transparent, veins black.

Long. 16, exp. alar. 17½ mill.

Habitat New Holland.

Fœnus flavitarsis, Guér.-Mén. op. cit. p. 407.

Like the last, but larger, with the oviduct nearly half as long again as the whole body; lateral filaments terminated with white. Legs black, with the front of the fore and middle tibiæ and their tarsi yellow, the latter black at the tip. Posterior tarsi yellow, with the base of the first joint and the last joint black.

Long. 22, exp. alar. 20, long. ovipos. 30 mill.

Habitat Swan River, New Holland.

Fœnus thoracicus, Guér.-Mén. op. cit. p. 437.

Black, with a long streak of fulvous yellow on each side of the thorax, not extending to the fore margin. Legs black, with the underside of the thighs, and the base and tips of the tibiæ and of the tarsi fulvous, sides of the thorax beneath the wings with large fulvous spots. Head and thorax finely rugose. Abdomen black, spotted with fulvous beneath.

Long. 17, exp. alar. 16 mill. (male.)

Habitat New Holland.

Fœnus Capensis, Guér.-Mén. op. cit. p. 405. Brullé, Hist. Nat. Ins. Hym. iv. p. 531.

Black, with the antennæ (except at the base), four fore legs, underside of the femora, base of the tibiæ and tarsi of the hind legs, fulvous; first segment of the abdomen, and a large spot on each side of the second and third segments, fulvous: oviduct of the length of the abdomen. Wings transparent, with blackish veins.

Long. 14, exp. alar. 14 mill.

Habitat Cape of Good Hope.

Fœnus Brasiliensis, Blanchard. Westw. Trans. Ent. Soc. vol. iii. p. 260.

Niger, thoracis et abdominis lateribus rufo-ferrugineis, pedibus nigro, ferrugineo, et flavo variis, thorace punctato (fem.)

Long. 0,020. Expans. alar. 0,016.

Brullé, Hist. Nat. Ins. Hym. iv. p. 530.

Fœnus rufipectus. Westw.

Gracillimus, niger; capite obconico, vertice convexo polito, facie argentea, ore rufo; antennis piceis, apice magis rufescentibus, collo valde elongato nigro, thorace nigro, punctato, pectore, lateribus, metanoto pone abdominis insertionem rufis; abdomine valde elongato, nigro, subtus piceo; pedibus piceis, coxis pedum 4 anticorum rufis, tibiis basi apiceque albidis, tarsis 2 anticis albis, intermediis duobus fuscis basi albis; pedibus 2 posticis piceis, basi tibiæ subtus apiceque articuli basalis tarsorum albidis; alis hyalinis, purpureo viridique nitidissime fulgentibus, terebra longitudini abdominis æqualis. ♂ ♀.

Long. corp. lin. 6 (oviduct. exclus.) Expans. alar. antic. lin. 6.

Habitat in insula St. Vincentii. In Mus. Brit.

Affinis *F. gracillimo*, at gracilior et aliter coloratus.

Fœnus Kirbii, Barnston, MS.

F. assectatori proximus, niger, subopacus; thorace variolosopunctatissimus; antennis piceis, extus rufescentibus extremo apice nigro, mandibularum apice rufo; pedibus 4 anticis piceo-rufis, coxis nigris, femoribus subtus nigris, pedibus 2 posticis cum coxis nigrescentibus, geniculis rufis; tarsis brevibus, rufo-piceis; abdomine nigro nitido, rufo-bifasciato;

terebra vix quartam partem abdominis æquante; alis parum infumatis, stigmate nigro.

Long. corp. lin. $5\frac{1}{2}$. Expans. alar. antic. lin. $6\frac{1}{2}$.

Habitat Hudson's Bay, Amer. septr. D. Barnston. In Mus. Brit.

Fœnus Barnstoni, Westw.

F. jaculatori proximus, niger, facie utrinque lateribusque thoracis parum argentatis, mandibulis et antennis nigris; capite obconico lævi, collo elongato, thoracis dorso in medio transverse striato, metanoto sub abdominis insertionem rugoso; pedibus 4 anticis gracilibus, piceis, coxis omnibus nigris, tibiis basi albidis, pedibus 2 posticis nigris, coxis transverse striatis, tibiis annulo subbasali albido, tarsis albidis, extremo apice nigricanti; abdomine nigro, rufo-bifasciato; terebra corporis toti longitudine, valvulis apice albis; alis fere hyalinis, stigmate piceo.

Long. corp. (oviduct. excl.) lin. 8. Expans. alar. antic. lin. 8.

Habitat Hudson's Bay, Amer. septentr. D. Barnston. In Mus. Brit.

Fœnus varipes, West.

Elongatus, niger, abdomine piceo-nigro, lateribus et parte infera mesothoracis obscure rufis, pedum 4 anticorum basi et apice tibiaram basique tarsorum, et basi tibiaram 2 posticarum albidis; alis infumatis, stigmate venisque anticarum nigris; antennis subbreuibus nigris, capite postice elongato, vertice convexo lævi, antice et postice, albido parum sericanti, thoracis dorso rugosulo ♂.

Long. corp. (oviduct. excl.) lin. $7\frac{1}{2}$. Expans. alar. antic. lin. $7\frac{1}{2}$.

Habitat in China. In Mus. Brit.

Fœnus Raphidioides, West.

Pergracilis, capite magno plano obconico-cordato, collari thoracis longitudine, tibiis posticis valde clavatis; niger, thoracis lateribus anticis et metanoto rufis ♀.

Long. corp. lin. $4\frac{1}{2}$; oviduct. vix lin. 1. Expans. alar. lin. $4\frac{3}{4}$.

Habitat in Australia Australiori (Adelaida?). In Mus. Westwood.

Species parva sed singularis. Caput magnum, obconico-ovale, thorace latius, basi angusto truncato, subconvexo, fere lævi, parum nitido. Ocelli fere ad marginem posticum capitis

inserti. Antennæ prope os nigræ, breves. Mandibulæ pallide-testaceæ, dente basali transverso acuto, alio parvo acuto subapicali. Collare valde elongatum, antice sensim attenuatum læve, striola media longitudinali supera impressum. Thorax supra lævis, parvus, lateribus anticis et metanoto rufis. Pedes 4 antici nigri, geniculis rufis, postici 2 nigri, tibiis valde clavatis, basi subtus et basi articuli 1mi tarsorum albis. Alæ hyalinæ, venis gracillimis, stigmatè angusto nigro, cellula discoidali minima. Abdomen nigrum, membrana laterali segmentorum testacea. Oviductus perbrevis, vaginarum apice extremo albo.

Fœnus spinitarsis, Westw.

Brevis, robustus; capite transverso rotundato, collari brevissimo; rufus; antennis (articulo basali rufo excepto) tarsisque piceis, tarsorum posticorum articulis basalibus supra acute productis ♂.

Long. corp. lin. 5. Expans. alar. $6\frac{1}{4}$.

Habitat Gold Coast, Africæ occident. tropicalis. In Mus. Westwood.

Species satis robustus, subnitidus, capite et thoracis dorso parum punctatis, hoc antice et postice transverse striolato. Caput valde convexum, transverse rotundatum. Ocelli inter oculos inserti. Mandibulæ magnæ rufæ, extus et apicibus nigris, dente valido subbasali, alteris duobus ante apicem acutum et falcatum. Thorax brevis, metanoto valde declivi. Pedes 4 antici satis graciles, 2-postici crassi, tibiis mediocriter clavatis, tarsorum articulis duobus basalibus extus in spinam acutam productis. Alæ luteo parum tinctæ, stigmatè magno nigro.

Fœnus patellatus, Westw.

Niger, capite et lateribus thoracis argenteo-sericeis, mesonoto scabro, lateribus et scutello magis rufescentibus; coxis posticis castaneis, tarsorum posticorum articulis duobus basalibus dilatatis albis ♂.

Long. corp. lin. 7. Expans. alar. lin. 9.

Habitat in Nova Hollandia. In Mus. Smith.

Caput fere rotundatum, sublæve, facie inter antennis carinata, argenteo-sericans, postice emarginatum. Mandibulæ nigræ, apice piceæ. Collare parum elongatum. Thorax supra scaber, antice vix transversim striolatus, lateribus thoracis et meta-

noto (subtus basin abdominis) magis rufescentibus et valde sericantibus. Abdomen nigrum, lateraliter magis piceum. Pedes 4 antici nigri, geniculis piceis, 2 postici coxis læte castaneis; femoribus in medio obscure rufis; tibiis nigris, parum clavatis, tarsorum articulis duobus basalibus dilatatis depressis albis, 1mi basi nigro, tertio mediocri, nigro basi albo. Alæ hyalinæ, venis nigris, stigmatate fusco.

Fœnus rufus, Westw. Monogr. Sp. 15.

Individua duo fœminea hujus speciei, ut videtur, vidi, mesonotum macula parva media notatum habentia, nec non striolam nigram dorsalem abdominalem, oviductum e quarta parte abdomine brevior, antennis graciles ejusdem longitudinis, faciem sericantem in medio parum carinatam, et tibiae posticas mediocriter clavatas.

Long. corp. lin. $7\frac{1}{2}$, oviduct. lin. 4. Expans. alar. antic. lin. 9. Habitat prope Adelaide, Australasia. In Mus. Smith and Westwood.

Genus AULACUS.

M. Brullé (Hist. Nat. Inst. Hym. iv. 343) states that he has found the ungues of the tarsi small and simple in both sexes of *A. striatus*, with the pulvillus large, whilst they are large and pectinated in *A. Latrellianus* (female = *A. Patrati*), and with the pulvillus small.

Aulacus Guerinii, Westw.

Syn. *Aulacus ater*, Guérin, Mon. Icon. R. An. Texte, p. 408.

Entirely black, shining. Head large, with the crown very elevated behind. Neck slender, elongated, received in a deep impression of the head. Thorax elevated, with the anterior lobe strongly striated, transversely emarginated in the middle, the remainder of the surface rugose and striated. Abdomen smooth, a little compressed, much thickened, and a little curved at the tip, terminated by an ovipositor, nearly as long as the abdomen, with the lateral filaments black. Legs moderately elongated, slender, shining, posterior tarsi with the hinder half of the first joint and all the second yellow. Wings transparent, with black veins, the tip of the fore wings slightly stained with brown. Antennæ long, slender and black.

Long. corp. 13, expans. alar. 21 mill.

Habitat Rio Janeiro.

Aulacus hæmorrhoidalis, Westw.

Niger, thoracis dorso valde rugoso, antice bicornuto; antennis gracilibus nigris, medio testaceis; pedibus nigris, anticorum tibiis et basi tiliarum, nec non dimidio apicali abdominis, rufis ♀.

Long. corp. lin. 6; oviductus lin. 6. Expans. alar. ant. lin. 9. Habitat in Brasilia (Para). In Mus. Britann. et Westw.

Species gracilis. Caput fere rotundatum, sublæve, antice prope antennas punctis minutis instructum, genis ad basin mandibularum angulatis. Mandibulæ breves, nigræ. Antennæ graciles, nigræ, articulis 5°, 6°, 7°, 8°, et basi 9^a testaceis. Collare mediocriter elongatum. Thorax niger, antice et ad latera griseo-subhirsutus, supra irregulariter et transversim striolatus, præsertim versus marginem anticum, hujus angulis anticis porrectis acutis cornutis, lateribusque ante alas subangulatis. Mesonotum irregulariter areolatum. Pedes graciles, nigri, anticorum tibiis et basi tarsorum testaceis; intermediorum geniculis piceis, posticis cum valvulis oviductus nigris. Alæ hyalinæ, stigmatate nigro, apice nubila parva nigricanti. Abdomen longitudini capitis et thoracis æquale, basi angusto nigro, apice clavato rufo.

Aulacus flavo-guttatus, Westw.

Niger, capite (vertice excepto), antennis pedibusque fulvis, thorace et abdomine pallide flavescenti guttatis, alarum apice extremo fusco.

Long. corp. ♂, lin. 6; oviduct. lin. 3. Expans. alar. antic. lin. 11.

Habitat in Australia Australiori. In Mus. Saunders et Westw.

Caput subrotundatum, læve, fulvum, verticis macula magna rotundata nigra. Antennæ maris corporis toti longitudine, fulvæ, articulis 9-11 sensim obscurioribus, apicalibus duobus albidis; fœminæ breviores fulvæ, articulis 10-13 albidis, apicali nigro. Mandibulæ breves, apice piceæ. Thoracis dorsum striolatum, striolis ad partem anticam multo profundioribus, angulis anticis rotundatis et parum elevatis; albedo-marginatis, lateribus anticis guttis tribus albidis in triangulum dispositis; dorso guttis novem ejusdem coloris (2 inter alas anticas, 2 inter posticas, 3 pone alas et 2 ad angulos

posticos. Pedes graciles, fulvi, coxis omnibus nigris. Abdomen glaberrimum, nitidum, nigrum, segmento singulo utrinque striola parva albida. Valvulæ oviductûs nigrae.

Aulacus ruficeps, Westw. (Pl. VII. fig. 3.)

Niger, nitidus, pilis argenteo-griseis vestitus, capite castaneo-rufo, glaberrimo et convexo; antennarum articulo basali obscure castaneo; alis limpidis, stigmatate venisque nigris; valvulis terebræ ante apicem albo-fasciatis.

Long. corp. lin. $4\frac{1}{2}$; oviductûs long. 3. Expans. alar. antic. lin. 8.

Habitat in Para Brasiliæ. In Mus. Britann.

Caput glaberrimum, convexum, vertice lævi; facie punctis minutis paucis impressum, postice late emarginatum; castaneo-rufum. Antennæ nigrae, capite et thorace vix longiores, articulo basali obscure castaneo, articulis 7° , 8° , 9° , et basi 10° albidis. Thorax niger, nitidus, valde rugosus et striolatus, angulis anticis rotundatis acute elevatis, et in spinam parvam recurvam elevatis (fig. 3 a); metanoto irregulariter areolato. Abdomen nigrum, nitidum, clavatum. Valvulæ oviductûs nigrae, fascia alba ante apicem. Alæ hyalinæ, valde iridescentes, stigmatate et venis nigris; nubila parva sub stigmatate apiceque alarum fusco.

Aulacus Resutorivorus, Barnston, MS.

Niger, tenuissime punctatissimus; capite fere lævi, griseo sericeo, abdomine elongato ovali nigro nitido, segmento basali utrinque macula magna rufa; antennis nigris, pedibus 4 anticis rufo-piceis, tarsis obscurioribus, pedibus posticis nigris, femoribus tibiisque apice extremo rufescentibus; alis infuscatis, apice clarioribus, costa maculaque quadrata sub stigmatate nigro-fuscis, oviductu longitudine thoracis et abdominis.

Long. corp. lin. 9; long. oviductûs lin. 7. Expans. alar. antic. lin. 15.

Habitat in America Boreali, Hudson's Bay.

Larvæ *Monochami resutoris* parasita. D. Barnston.

Genus CAPITONIUS, Brullé, Hist. Nat. Ins. Hym. iv. p. 544.

This new genus differs from *Aulacus* in having the third discoidal cell not closed, the head nearly cubical, with a deep frontal

impression to receive the antennæ; face wide. Abdomen depressed, oval, affixed on the hind upper extremity of the metathorax, which is suddenly truncate behind. Prothorax forming a long neck. Antennæ filiform, shorter than the body, first joint long and cylindric, second short and globular, and eleven (twelve?) joints, slightly diminishing in length. Fore wings with a rather large radial cell not extending to the tip of the wings; three cubital cells, the outer one very long; two discoidal closed, and the third very long, extending to the tip of the wing; hence there is only one recurrent vein, and a single posterior marginal cell. Legs rather long; ungues with a strong tooth at the base.

Capitoniüs bifasciatus, Brullé, op. cit. p. 545.

Nigro rufo et flavo varius, alis flavis, anterioribus fasciis 2 posterioribus, fascia unica fuscis, metathorace rugoso.

Long. 0.010.

Habitat Pará, Brazil.

Upper side of head and antennæ black; lower part of head and mouth yellow. Prothorax yellowish red. Metathorax [mesothorax?] yellow. Upper side of the metathorax blackish-brown, with the scutellar region yellowish red; the sides of the mesothorax and of the breast black; the three basal segments of the abdomen bright red, the remainder black; fore legs reddish-yellow, hind legs black. Abdomen depressed and shining, first segment nearly flat and triangular, rather longer than broad.

Genus MEGALYRA.

Megalýra rufipes, Erichson, Beitrag zur Insecten Fauna von Vandiemen's Land, p. 258.

"Nigra, pedibus rufis, alis anticis fascia fusca.

Long. corp. $5\frac{1}{2}$; acul. 18 lin.

"Nigra. Antennæ tenues, 14-articulatæ, articulo 1mo crassiusculo nigrae, articulo tertio infra ferrugineo. Caput punctatissimum, albido-puberulum. Thorax punctatissimus, albido-puberulus, prothorace vittis duabus, mesothorace plaga media obsoletis sanguineis. Abdomen læve, parcius albido-puberulum, aculeus corpore plus triplo longior. Pedes albo-puberuli, rufi, coxis trochanteribusque nigris. Alæ hyalinæ, apice infuscatæ, anticæ fascia transversali fusca."

This species seems to me scarcely to differ from *M. fasciipennis*.

Megalyla Shuckardi, Desvignes, MS. Pl. VII. fig. 2.

Niger, metanoto truncato, angulis porrectis, alis nigricantibus, plaga pallidiori pone medium notatis ♀.

Long. corp. fere unc. 1; oviduct. unc. $3\frac{1}{2}$. Expans. alar. antic. unc. $1\frac{7}{12}$.

Habitat in Nova Hollandia. In Mus. Britan., Jard. des Plantes, Paris, et Smith.

Corpus robustum, subcylindricum, lateribus capitis, thoracis et abdominis argenteo-griseo parum sericantibus. Caput et thorax valde et rugose punctata. Antennæ pergraciles, 14-articulatæ, articulo 4to præcedenti dimidio longiori, 5to et sequentibus sensim abbreviatis, ultimo brevissimo. Caput transversum, antice rotundatum, angulisque posticis rotundatis. Collare minus rugose-punctatum quam in *M. fasciipenne*. Metanotum in medio canaliculatum, canali profundiori (præsertim postice) quam in specie prædicta; angulis posticis porrectis. Abdomen magis ovale, segmento primo nitido; reliquis sub lente punctis minutis valde contiguis impressis. Pedes, præsertim versus apicem tibiarum posticarum, argenteo-sericei. Alæ obscure fusco-nigricantes, plaga subovali pallidiori pone medium notatæ. Oviductus longissimus, corpore fere quadruplo longior.

Megalyla mutilis, Westw. (Plate VII. fig. 1.)

Niger, capite et thorace valde rugosis, illo globoso, hoc elongato obconico truncato; abdomine elongato ovali glaberrimo, alis perbrevibus nigris.

Long. corp. lin. 11. Expans. alar. anticar. lin. 8.

Habitat apud Adelaidam Australasiæ. In Mus. Westwood.

Insectum persingulare. Caput fere globosum, valde rugosum, punctis irregularibus profundis contiguis omnino impressum. Antennæ perbreves, gracillimæ, prope os insertæ. Mandibulæ breves, nigræ. Thorax subcylindricus, oblongo-obconicus, antice et postice truncatus, lateribus argenteo-griseo setosis. Mesonotum magnum, rugosum, punctis profundis irregulariter confluentibus impressum. Scutellum punctis ovalibus lineaque media parum profunda impressum. Metanotum irregulariter areolatum, carinisque elevatis gracillimis semicircularibus instructum. Alæ parvæ, vix capite

longiores, nigræ, venis ut in congeneribus dispositis. Pedes breves, nigri, tibiis et tarsis pedum posticorum setis griseis dense vestitis. Abdomen elongato-ovale, glabrum, nitidum, nigrum, lateraliter punctis parvis impressum; segmento basali læve, reliquis sub lente delicatissime granulatis.

Genus STEPHANUS.

M. Brullé (Hist. Nat. Ins. Hym. iv. p. 536) confines this genus to the European *Stephanus serrator* of Fabricius, on account of its possessing five joints in the hind tarsi, the fourth being short, oblique, and prolonged beneath the following joint. This structure, however, also exists in the male of the following species.

Stephanus Brasiliensis, Westw. in Griffith, Animal Kingdom.
pl. 66, f. 3, ♂.

The figure above referred to correctly represents the hind tarsi as five-jointed. The hind femora are furnished beneath with two strong teeth, having a smaller one between them and several slight serratures.

Genus MEGISCHUS, Brullé, Hist. Nat. Ins. Hym. iv. p. 537.

This genus consists of such species of *Stephanus* as possess only three joints in the posterior tarsi, the middle joint being prolonged beneath the terminal joint, and the two posterior femora are armed beneath with a row of small teeth, two of which are larger than the rest, whereas in *Stephanus* the hind femora are armed with three large teeth, and destitute of the smaller denticulations. I believe, however, that this character is merely a sexual one, and that it is peculiar to the females alone.

Megischus coronator, Fabricius. Westw. Trans. Ent. Soc. iii. p. 276 (*Stephanus cor.*); Brullé, Hist. Nat. Inst. Hym. iv. p. 538.

M. Brullé gives, as the habitat of this species, the East Indies, collected by Messieurs Diard and Duvaucel, and New Guinea (Dorey), captured during the expedition of Capt. D'Urville, the specimen from the latter locality having the colour of the wings rather more dusky.

Megischus annulator, Brullé, Hist. Nat. Ins. Hym. iv. p. 539.
pl. 40, fig. 5.

Niger, alis subhyalinis, abdominis segmento 2do toto lævigato, terebræ valvulis ante apicem annulo albo.

Long. corp. 0,040; long. oviduct. 0,055.

Habitat unknown. Coll. Mus. Hist. Nat. Paris.

The cheeks of this species are marked with a red spot; the mandibles in part ferruginous, as well as the anterior part of the prothorax. The scutellar region is entirely smooth; the metathorax marked with some large punctures, transversely strigose behind, and slightly so in the middle; the first segment of the abdomen is very finely strigose transversely, the remainder are smooth, the second alone presenting one or two strigæ at the base. The figure of this species is very unsatisfactory, not representing the white bar of the valves of the ovipositor, and giving four joints to the posterior tarsi.

Megischus furcatus, Serv. and St. Fargeau. Westw. Trans. Ent. Soc. iii. p. 276 (*Stephanus f.*); Brullé, Hist. Nat. Ins. Hym. iv. p. 539?

I have been obliged to add a query to the last citation, as M. Brullé describes the insect thus: "Niger, alis fere fuscis, abdominis segmento 2do lævigato, valvulis terebræ nigris. Long. corp. 0,030; long. ovid. 0,040. Cette espèce ressemble beaucoup à la précédente. Elle n'en diffère, pour ainsi dire, que par sa taille moindre, par la couleur plus foncée de ses ailes, et par les valves de sa tarière, qui sont plus grêles, sans anneau blanc, et dont l'extrémité n'est pas lanceolée comme dans le *M. annulator*." In the original description in the Encyclopédie Méthodique, as well as in Guérin's figure, the valves of the terebra are however marked with a white bar near the tip, so that either M. Brullé has described another distinct species, (which seems improbable, as he refers to M. Serville's cabinet,) or the specimen must have had the extremity of the valves of the terebra broken off, and this seems the more probable from what M. Brullé says respecting their tips not being lanceolate. M. Brullé also describes the cheeks as being marked with a red spot, and the mandibles as ferruginous at the base.

Megischus acutus, St. Farg. and Serville. Westw. Trans. Ent. Soc. iii. p. 276 (*Stephanus ac.*); Brullé, Hist. Nat. Ins. Hym. iv. p. 540.

M. Brullé has added several particulars to the original descrip-

tion in the Encyclopédie of this small species, the body of which is 0,016 millemetres long, and the ovipositor 0,017, derived from M. Serville's original specimen.

Megischus ducalis, Westw.

Niger, capite punctato rufo, vertice semicirculariter striato, antice tuberculis quinque acutis nigris frontalibus; antennis nigris, articulo basali rufo; mandibulis rufis porrectis, apice nigris; palpis maxillaribus castaneis, articulo basali rufo; thorace nigro, nitido, irregulariter punctato; metanoti medio canaliculato, circulisque numerosis impressis punctato; hujus lateribus dilatatis; abdominis pedunculo longitudine capitis et thoracis, transversim striato, e basi sensim fere ad medium incrassato, et exinde ad apicem sensim attenuato; segmentis reliquis clavam conjunctim formantibus et pedunculo brevioribus, glaberrimis; terebra corpore toto parum longiori, valvulis fascia lata ante apicem alba; pedibus nigris, longe hirtis, femoribus posticis crassis, dente parvo ante, altero pone medium, denticulis tribus adjectis; alis limpidis, fulvido parum tinctis, venis distinctis, posticis venis duabus abbreviatis subapicalibus.

Long. corp. (oviductu excluso) unc. $1\frac{5}{2}$; oviduct. $1\frac{1}{2}$ unc.

Exp. alar. antic. unc. $1\frac{3}{4}$.

Habitat in India Orientali. In Mus. Britann.

Megischus maculipennis, Westw.

M. gracillimus, niger, capite rufo, antennarum articulis tribus basalibus basi que palporum rufis, horum apicibus fuscis; alis sublimpidis, anticis nubila media fusca, tiliarum posticarum apice tarsisque rufo-piceis; capite supra irregulariter punctato et transverse strigoso, vertice denticulis quinque nigris inter oculos, mandibulis apice nigris, pronoto fortiter transverse sulcato, mesonoto in medio lævi, metanoto oblongo punctis rotundatis vix contiguis, thoracis lateribus obsolete punctatis, albo-sericantibus; pedunculo abdominis tenuissimo transverse striatulo, ante medium utrinque dente minimo instructo, abdomine glaberrimo; oviductus valvulis ante apicem fascia alba, spatium inter fasciam et apicem latitudini fasciæ æquali; femoribus posticis dentibus duobus denticulis nonnullis adjectis armatis.

Long. corp. fere unc. 1; oviduct. unc. $1\frac{1}{2}$. Exp. alar. antic. unc. $1\frac{1}{8}$.

Habitat Pará, Brasiliæ. In Mus. Brit.

Megischus submaculatus, Westw.

Niger, capite rufo, pedibus nigris, antennis nigris, articulo basali rufo, alis subhyalinis, oviductûs valvulis fascia alba fere apicali, pedibus nigris.

Long. corp. unc. $1\frac{1}{2}$; oviduct. unc. $1\frac{1}{3}$. Exp. alar. antic. unc. $1\frac{1}{6}$.

Habitat Pará, Braisilæ. In Mus. Brit.

Præcedenti valde affinis. Differt statura paullo crassiori, alis in medio tantum parum obscurioribus, palpis fuscis, pedibus nigris, femoribus crassioribus, pronoto et collari vix transversim striato, meso- et metanoto punctis multo paucioribus, hoc breviori, pedunculo abdominis transverse striato, tuberculis duobus majoribus lateralibus ante medium armato.

Megischus cylindricus.

Niger, pergracilis, capite et antennarum basi rufis; alis hyalinis, oviductûs valvulis paullo ante apicem albo-fasciatis, petiolo abdominis nigro cylindrico tenuissime striato, utrinque carinis tenuissimis longitudinalibus paullo elevatis instructo; capite ruguloso, vertice denticulis quinque rufis obtusis, mandibulis rufis, apice nigris, palpis fuscis, pronoto transversim sulcato, meso- et metanoto mediocriter punctatis; abdominis segmento secundo spatio parvo dorsali, versus marginem posticum, segmento 2^{do} supra fere omnino subopacis, lineis tenuissimis striatis sub lente distinctis; pedibus nigris, tarsis posticis piceis, femoribus posticis dentibus duobus fortibus denticulisque nonnullis adjectis.

Habitat Pará, Brasiliæ. In Mus. Brit. et Westw.

Long. corp. unc. $\frac{5}{8}$; oviduct. unc. $\frac{3}{8}$. Exp. alar. antic. unc. $\frac{3}{8}$.

Obs. Individuum ♀ possideo, cujus corpus unc. $\frac{3}{4}$ longitudinem habet et oviductus unc. $1\frac{1}{4}$.

Megischus Indicus.

Niger, capite fulvo, vertice piceo; denticulis quinque nigris, labro mandibulisque fulvis, horum apice nigro; antennis piceis, articulis basalibus fulvis, palpis similiter coloratis; pedibus 4 anticis fulvis, femoribus magis castaneis, posticis nigris, dentibus duobus crassis denticulisque nonnullis adjectis armatis, tarsis posticis piceo-fulvis; pronoto tenuissime transverse striatulo, metanoto rudè punctato.

Long. corp. lin. $5\frac{1}{2}$. Exp. alar. antic. lin. $5\frac{1}{2}$.

Habitat in Insulis Philippinensibus. In Mus. Brit.

Genus TRIGONALYS, Westwood.

Syn. *Sphex p.*, De Geer; *Cælius*, Serville, olim; *Seminota*, Spinola; *Abastus*, St. Fargeau, olim; *Trigonalys et Lycogaster*, Shuckard.

Sp. 3. *Trigonalys depressa*.

Sphex depressa, De Geer. (Vid. Monogr. Trans. Ent. Soc. iii. p. 273.)*

Trigonalys obscura, West. op. cit.

Trigonalys bipustulata, Smith, in Annals of Nat. Hist., 2nd series, vol. vii. p. 28.

Trigonalys compressa, Smith, in Trans. Ent. Soc. New Series, vol. i. p. 178, pl. xvi. fig. 2.

The parasitic connexion of this species with *Polistes lanio* has been determined by Mr. F. Smith, in the present volume of the Transactions of our Society. In addition to the specimens in the Collections of the British and Berlin Museums, and that of W. W. Saunders, Esq., I possess a specimen presented to me by J. A. Turner, Esq., of Manchester, the antennæ of which are composed of twenty-three joints. Mr. Smith states that Mr. Saunders's individual possesses only twenty. The examination of these different specimens has convinced me that that contained in the Berlin Museum is only a variety of De Geer's species.

Sp. 7. *Trigonalys maculata*, Smith. (Plate VII. fig. 4.)

Nigra, capite et thorace flavo-maculatis, abdomine flavo fasciato; antennis fuscis, medio ferrugineis; pedibus castaneis; alis fusco parum tinctis, costa lata anticarum obscuriori.

Long. corp. lin. 5. Exp. alar. antic. lin. 8.

Habitat Moreton Bay, Australasia. In Mus. Britann. and Westw. Communicavit D. Parry.

Trigonalys maculata, Smith, in Annals of Nat. Hist. 2nd series, vol. vii. p. 28.

Caput, thorax et abdomen punctis minutis numerosissimis undique notatum. Caput rotundatum, subdepressum, nigrum, macula elongata ad marginem internum, alteraque ad marginem posticum oculorum; maculis duabus parvis clypei et duabus ad basin antennarum striolaque in medio interrupta

* "*Sphex (depressa)*, nigra, capite lato depresso; alis exterius fuscis, abdomine gibbo; petiolo depresso, maculis binis flavis."—*De Geer*.

versus marginem posticum capitis, omnibus flavis. Antennæ piceæ, articulis 4 et quinque sequentibus magis castaneis. Mandibulæ flavæ, dentibus nigris, dextera dentibus 4 æqualibus acutis, sinistra dente subapicali latiori, denteque præcedenti lato truncato (fig. 4 *a*, mandibulis vero reversis). Palpi maxillares 6-articulati (fig. 4 *b*); palpi labiales articulo ultimo securiformi (fig. 4 *c*). Antennæ graciles, 25-articulatæ. Thorax niger, dorso antice maculis duabus obliquis flavis, punctis minutis distantibus scutelli alterisque duabus postscutelli apiceque metanoti duabus flavis. Abdomen nigrum, flavo-fasciatum, fasciis posticis interruptis, apice valde incurvo, segmentum 2dum subtus productum fere attingente (fig. 4 *d*). Pedes fulvi, trochanteribus albidis, femoribus basi obscurioribus. Alæ parum fuscescentes, costâ late castaneo-fuscâ.

The discovery of a species of this genus in New Holland is of considerable geographical interest, the species hitherto known being natives of North and South America, and Europe. The species also is the most elegant yet discovered. The only individuals hitherto known were obtained in a collection from Moreton Bay by Captain Parry, F. L. S., to whom I am indebted for my specimen.

I take this opportunity of describing a new genus of Hymenopterous insects collected in the East Indies by Captain Boys, belonging to a family hitherto known only as inhabitants of South America and New Holland, but differing from the species already described in several generic particulars. Unfortunately, only a single specimen of the male sex has been hitherto observed, and I am only able, by analogy, to infer that the female when discovered will be a wingless insect, considerably smaller than the male.

Family THYNNIDÆ.

Genus ISWARA, Westw.

Characteres masculini. *Corpus* subcylindricum, fere læve, pallidum. *Caput* (fig. 5 *a*) mediocre, longitudine latius, lateribus rotundatis. *Oculi* magni, laterales, margine interno fere recto, vix emarginato. *Clypeus* parum porrectus, parvus, in lobos duos subacutos divisus. *Labrum* clypeo absconditum. *Mandibulæ* graciles, falcatæ, apice acutæ, intus versus apicem

dente parvo tuberculiformi instructæ. *Maxillæ* (fig. 5 *b*) parvæ, lobo apicali ovali simplici membranacea paullo ciliata. *Palpi* maxillares minuti, ut videtur 3-articulati, articulo basali brevissimo, 2^{do} longiori, apice paullo crassiori, 3^{tio} brevi subconico, apice bisetigero. *Mentum* (fig. 5 *c*) elongato-obconicum, apice recte truncato, bisetosum. *Palpi* labiales ad angulos ejus anticos laterales inserti, minimi, 3-articulati, articulis fere æqualibus, ultimo subacuto, seta terminali. *Ocelli* 3 magni in impressione occipitali positi. *Antennæ* subelongatæ subrectæ, apice haud convolutæ; in tubercula dua faciei insidentes, 13-articulatæ, articulo basali brevi, reliquis parum crassiori, 2^{do} minimo in apice præcedentis fere omnino recepto; reliquis sensim sed parum attenuatis singuloque ad apicem paullo curvato. *Thorax* oblongus subcylindricus, postice paullo attenuatus. *Collare* transversum, usque ad tegulas lateraliter utrinque extensum, striola transversa per medium ut videtur supra divisum. *Scutellum* fere quadratum, convexum. *Postscutellum* transversum. *Metathorax* rotundatus, dorso utrinque parum impressus. *Alæ* mediocres, stigmatem magno: cellula unica marginali, apice appendiculato; cellulis tribus submarginalibus; 1^{ma}, ut videtur, cum cellula antica discoidali confluenti, venula obliqua ordinaria illas separante, fere oblitterata (in figura 5^{ta} omissa); cellula 2^{nda} submarginali subtriangulari, (angulis vero 6 instructa, antica basi stigmatem opposita, ubi vena suboblitterata supra dicta e cellula emittitur), venam primam recurrentem accipiente; cellula 3^{tia} submarginali subquadrata, venam secundam recurrentem accipiente; et ad angulum ejus venam fere indistinctam versus marginem apicalem alæ emittente. *Pedes* mediocres, setis acutis instructi, tarsis posticis reliquis multo longioribus; unguibus minutis (fig. 5 *f*), versus apicem subtus dente acuto minimo instructis. *Abdomen* ovale, setosum, segmentis 2^{do} et reliquis supra impressione semicirculari recurva utrinque notatis; genitalia mascula lobis duobus magnis compressis spinaque acuta media infera recurva armata. (Fig. 5 *e* lateraliter, 5 *d* infra visa.)

Isnara luteus, Westw. (Plate VII. fig. 5 and details.)

Albido-luteus, collari, scutello et pedibus magis albidis; nitidus; capite nigro, antennis, clypeo et mandibulis (apice excepto) luteis; alis subhyalinis.

Long. corp. lin. 4½. Expans. alar. lin. 7.

Habitat in India Orientali (D. Boys). In Mus. Westwood.

Caput nitidum, parum punctatum. Thorax fere lævis, collari antice magis punctato. Abdomen sub lente punctis delicatissimis undique impressum. Alæ apice parum obscuriores, stigmatibus luteo-fusco, postice magis fusco.
Fœmina ignota, forsan aptera et mare multo minor.

XXVII. *Remarks on the Psychidæ, by Professor C. Th. v. SIEBOLD, published in the Silesian "Bericht über die Arbeiten der Entomologischen Sektion im Jahre 1850."*
Translated by H. T. Stainton, Esq.

[Read October 6th, 1851.]

I HAVE already endeavoured, in the first year (1849) of the "Zeitschrift für wissenschaftliche Zoologie," to direct the attention of Physiologists and Entomologists to the extremely interesting mode of propagation of the *Psychidæ*, when I maintained that the assertion, that the female individuals of the *Psychidæ* could propagate without the introduction of the semen of the male, was founded on mistake and error.

The whole of the peculiar behaviour of these moths in the business of copulation, as well as when laying their eggs, may easily contribute to lead the observer into error, as may be perceived from the following. The females of many of these case-bearers, after copulation, lay their eggs in the deserted pupa-shell which remains in the case, and fill it with them tightly from top to bottom, so that if these cases are collected and preserved, one may easily fall into the belief they were the cases in which the females had not yet escaped from the pupa. Consequently, when young larvæ afterward crawl out of such cases, one erroneously concludes, that in this instance a female which had been obtained whilst in the pupa state, and therefore had not been impregnated, had *sine concubitu* produced young. But this only concerns the two genera of *Psychidæ*, *Psyche* and *Fumea*, and is not the case with the genus *Talæporia*. I have now arrived at the conviction that the females of the genus *Talæporia*, which formerly I had not learnt to distinguish strictly from the females of the genus *Fumea*, can under certain conditions propagate without male intercourse.

But this occurrence can not be considered as an exception to those physiological laws, according to which all true eggs, in order